



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**646.3013**  
**Job Sheet 203824**



Part No: 646.3013

Job Qty: 30 pcs

Part Name: Blade



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/27/19

Job Tracking No:

Due Date: 1/12/20

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV N/C SHEET 10 IPP REV:A NEW ISSUE 12/11/09 JFS VERIFY BY: JLM

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation         | Qty    | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off |
|-------|-------------------|--------|------------|----------|-----------|---------|-----------------------|-----------|----------|
|       |                   |        |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |          |
| 100   | Bandsaw - 1       | 30 pcs |            | 1/12/20  | 0.00      | 0.52    | Bandsaw - 1           |           | 20-01-14 |
| 110   | HAAS 4 Axis - B4B | 30 pcs |            | 1/12/20  | 0.13      | 27.12   | HAAS - 1 - B4B        |           | 20-01-15 |
|       |                   |        |            |          |           |         | HAAS - 2 - B4B        |           |          |
|       |                   |        |            |          |           |         | HAAS - 3 - B4B        |           |          |
|       |                   |        |            |          |           |         | HAAS - 4 - B4B        |           |          |
| 120   | QC 2              | 30 pcs |            | 1/12/20  | 0.00      | 0.00    | QC 2 - 1              |           |          |
|       |                   |        |            |          |           |         | QC 2 - 12             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 14             |           | 20-01-15 |
|       |                   |        |            |          |           |         | QC 2 - 17             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 19             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 2              |           |          |
|       |                   |        |            |          |           |         | QC 2 - 20             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 22             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 23             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 25             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 32             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 33             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 35             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 39             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 4              |           |          |
|       |                   |        |            |          |           |         | QC 2 - 40             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 44             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 45             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 48             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 49             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 50             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 51             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 52             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 57             |           |          |
|       |                   |        |            |          |           |         | QC 2 - 62             |           |          |



Dart Aerospace Ltd.  
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CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
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Container No: S247466



Part: 646.3013

Job No: 203824

Serial No/Batch: S247466

Revision: Rev N/C

Inspector:

Exp Date:

Instructions: Various STC's

Date: 01/14/20



|                                   |           |         |      |      |                        |              |
|-----------------------------------|-----------|---------|------|------|------------------------|--------------|
|                                   |           |         |      |      | QC 2 - 63              |              |
|                                   |           |         |      |      | QC 2 - 8               |              |
|                                   |           |         |      |      | QC 2 - 66              |              |
|                                   |           |         |      |      | QC 2 - 64              |              |
|                                   |           |         |      |      | QC 2 - 65              |              |
|                                   |           |         |      |      | QC 2 - 5               |              |
|                                   |           |         |      |      | QC 2 - 71              |              |
|                                   |           |         |      |      | QC 2 - 73              |              |
|                                   |           |         |      |      | QC 2 - 69              |              |
|                                   |           |         |      |      | QC 8 - 12              |              |
|                                   |           |         |      |      | QC 8 - 14              | 2010/1/18    |
|                                   |           |         |      |      | QC 8 - 17              |              |
|                                   |           |         |      |      | QC 8 - 20              |              |
| 130 QC 8                          | 30<br>pcs | 1/12/20 | 0.00 | 0.00 | QC 8 - 25              |              |
|                                   |           |         |      |      | QC 8 - 3               |              |
|                                   |           |         |      |      | QC 8 - 32              |              |
|                                   |           |         |      |      | QC 8 - 33              |              |
|                                   |           |         |      |      | QC 8 - 35              |              |
|                                   |           |         |      |      | QC 8 - 39              |              |
|                                   |           |         |      |      | QC 8 - 4               |              |
|                                   |           |         |      |      | QC 8 - 44              |              |
|                                   |           |         |      |      | QC 8 - 45              |              |
|                                   |           |         |      |      | QC 8 - 49              |              |
|                                   |           |         |      |      | QC 8 - 58              |              |
|                                   |           |         |      |      | QC 8 - 8               |              |
|                                   |           |         |      |      | QC 8 - 9               |              |
|                                   |           |         |      |      | QC 8 - 68              |              |
|                                   |           |         |      |      | QC 8 - 67              |              |
|                                   |           |         |      |      | QC 8 - 1 (A)           |              |
|                                   |           |         |      |      | QC 8 - 47              |              |
|                                   |           |         |      |      | QC 8 - 40              |              |
|                                   |           |         |      |      | QC 8 - 52              |              |
|                                   |           |         |      |      | QC 8 - 23              |              |
|                                   |           |         |      |      | QC 8 - 57              |              |
|                                   |           |         |      |      | QC 8 - 76              |              |
|                                   |           |         |      |      | QC 8 - 61              |              |
| 140 Outsource - 1 - Heat Treat    | 30<br>pcs | 1/12/20 |      |      | MEI001-VC              | 5 2020-01-21 |
|                                   |           |         |      |      |                        |              |
| 150 Packaging 2-1 - Receive - B4B | 30<br>pcs | 1/12/20 | 0.00 | 0.00 | Packaging 2 - 1 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 2 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 3 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 5 - B4B  | JAN 30 2020  |
|                                   |           |         |      |      | Packaging 2 - 4 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 6 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 7 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 8 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 9 - B4B  |              |
|                                   |           |         |      |      | Packaging 2 - 10 - B4B |              |
|                                   |           |         |      |      | Packaging 2 - 11 - B4B |              |
|                                   |           |         |      |      | Packaging 2 - 12 - B4B |              |
|                                   |           |         |      |      | Packaging 2 - 13 - B4B |              |
|                                   |           |         |      |      | Packaging 2 - 14 - B4B |              |
|                                   |           |         |      |      | Packaging 2 - 15 - B4B |              |
|                                   |           |         |      |      | Packaging 2 - 16 -     |              |
|                                   |           |         |      |      |                        |              |

|                           |        |         |      |      |                                             |                 |
|---------------------------|--------|---------|------|------|---------------------------------------------|-----------------|
|                           |        |         |      |      | B4B                                         |                 |
|                           |        |         |      |      | Packaging 2 - 17 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 18 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 19 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 20 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 21 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 22 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 23 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 24 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 25 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 26 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 27 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 28 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 29 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 30 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 31 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 32 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 33 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 34 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 35 - B4B                      |                 |
|                           |        |         |      |      | Packaging 2 - 36 - B4B                      |                 |
| 155 QC 6                  | 30 pcs | 1/12/20 | 0.00 | 0.00 | QC 6 - 9                                    | DAS             |
|                           |        |         |      |      | QC 6 - 68                                   | FEB 04 2020 68  |
|                           |        |         |      |      | QC 6 - 61                                   | 9-89            |
|                           |        |         |      |      | QC 6 - 40                                   |                 |
|                           |        |         |      |      | QC 6 - 81                                   | DAS             |
| 160 Spray Paint - 2 - B4B | 30 pcs | 1/12/20 | 0.00 | 1.15 | Spray Paint - 1 - B4B                       | .41 FEB 05 2020 |
|                           |        |         |      |      | Spray Paint - 2 - B4B                       | 9-89            |
|                           |        |         |      |      | Spray Paint - 3 - B4B                       |                 |
|                           |        |         |      |      | Spray Paint - 4 - B4B                       |                 |
| 170 QC 14                 | 30 pcs | 1/12/20 | 0.00 | 0.00 | QC 14 - 15                                  |                 |
|                           |        |         |      |      | QC 14 - 2                                   |                 |
|                           |        |         |      |      | QC 14 - 34                                  |                 |
|                           |        |         |      |      | QC 14 - 41                                  |                 |
|                           |        |         |      |      | QC 14 - 51                                  |                 |
|                           |        |         |      |      | QC 14 - 58                                  |                 |
|                           |        |         |      |      | QC 14 - 59                                  |                 |
|                           |        |         |      |      | QC 14 - 9                                   |                 |
|                           |        |         |      |      | QC 14 - 68                                  |                 |
|                           |        |         |      |      | QC 14 - 40                                  |                 |
|                           |        |         |      |      | QC 14 - 19                                  |                 |
|                           |        |         |      |      | QC 14 - 43                                  |                 |
|                           |        |         |      |      | QC 14 - 24                                  |                 |
|                           |        |         |      |      | Plex 11/28/19 8:21 AM Dart.Renwick.Jennifer |                 |



|                                  |           |         |           |                        |             |
|----------------------------------|-----------|---------|-----------|------------------------|-------------|
|                                  |           |         |           | QC 14 - 61             | FEB 10 2020 |
|                                  |           |         |           | QC 14 - 81             |             |
| 180 .Packaging 3-1 - Stock - B4B | 30<br>pcs | 1/12/20 | 0.00 0.00 | Packaging 3 - 1 - B4B  |             |
|                                  |           |         |           | Packaging 3 - 2 - B4B  |             |
|                                  |           |         |           | Packaging 3 - 3 - B4B  |             |
|                                  |           |         |           | Packaging 3 - 4 - B4B  | DAS 74 9-89 |
|                                  |           |         |           | Packaging 3 - 5 - B4B  | FEB 11 2020 |
|                                  |           |         |           | Packaging 3 - 6 - B4B  |             |
|                                  |           |         |           | Packaging 3 - 7 - B4B  |             |
|                                  |           |         |           | Packaging 3 - 8 - B4B  |             |
|                                  |           |         |           | Packaging 3 - 9 - B4B  |             |
|                                  |           |         |           | Packaging 3 - 10 - B4B |             |
|                                  |           |         |           | Packaging 3 - 11 - B4B |             |
|                                  |           |         |           | Packaging 3 - 12 - B4B |             |
|                                  |           |         |           | Packaging 3 - 13 - B4B |             |
|                                  |           |         |           | Packaging 3 - 14 - B4B |             |
|                                  |           |         |           | Packaging 3 - 15 - B4B |             |
|                                  |           |         |           | Packaging 3 - 16 - B4B |             |
|                                  |           |         |           | Packaging 3 - 17 - B4B |             |
|                                  |           |         |           | Packaging 3 - 18 - B4B |             |
|                                  |           |         |           | Packaging 3 - 19 - B4B |             |
|                                  |           |         |           | Packaging 3 - 20 - B4B |             |
|                                  |           |         |           | Packaging 3 - 21 - B4B |             |
|                                  |           |         |           | Packaging 3 - 22 - B4B |             |
|                                  |           |         |           | Packaging 3 - 23 - B4B |             |
|                                  |           |         |           | Packaging 3 - 24 - B4B |             |
|                                  |           |         |           | Packaging 3 - 25 - B4B |             |
|                                  |           |         |           | Packaging 3 - 26 - B4B |             |
|                                  |           |         |           | Packaging 3 - 27 - B4B |             |
|                                  |           |         |           | Packaging 3 - 28 - B4B |             |
|                                  |           |         |           | Packaging 3 - 29 - B4B |             |
|                                  |           |         |           | Packaging 3 - 30 - B4B |             |
|                                  |           |         |           | Packaging 3 - 31 - B4B |             |
|                                  |           |         |           | Packaging 3 - 32 - B4B |             |
|                                  |           |         |           | Packaging 3 - 33 - B4B |             |
|                                  |           |         |           | Packaging 3 - 34 - B4B |             |
|                                  |           |         |           | Packaging 3 - 35 - B4B |             |
|                                  |           |         |           | Packaging 3 - 36 -     |             |

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|                |        |         |           |     |                 |             |             |
|----------------|--------|---------|-----------|-----|-----------------|-------------|-------------|
| 190 QC 21 - SA | 30 pcs | 1/12/20 | 0.00 0.00 | B4B | QC 21 - SA - 21 | FEB 11 2020 | DAS 70 9-85 |
|                |        |         |           |     | QC 21 - SA - 70 |             |             |
|                |        |         |           |     | QC 21 - SA - 53 |             |             |

Part Op 100 - Cut Blank at 4.930"

Descriptions: 110 - (HAAS CNC Vertical Machine) 1-Machine per folio FB150 2- deburr and break all sharp edges except otherwise noted KNIFE EDGE MUST BE SHARPENED USING STONE, REMOVE ALL BURRS ON CUTTING EDGE

120 - (QC2- Inspect parts off machine FAI/FAIB)

130 - (QC8- Inspect parts - second check)

140 - ISSUE P/O: 45640 FINISH: HEAT TREAT TO 58-62 RC ROCKWELL HARDNESS As Per Dwg 646.3000 PART ARE MADE FROM AISI A2 TOOL STEEL

150 - (Receive & Inspect for Damage & Mat'l Certs)

155 - (QC6- All purchased or subcontracted products)

160 - (Spray Paint / NDT Room) PRIME AS PER DWG, SEE NOTE #4 PRIMER BATCH: 5236137

170 - (QC14- Inspect Spray Paint)

180 - (Identify as per dwg & Stock Location: \_\_\_\_\_) \*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV\*\*\*

190 - (QC21- Final Inspection - Work Order Release)

## Job BOM

| Part / Item            | Component Name                        | Quantity             | Operation       | Container      |
|------------------------|---------------------------------------|----------------------|-----------------|----------------|
| MSTEEL-A2-B0.500X1.250 | AISI A2 Tool Steel Bar, 0.500 X 1.250 | 12.6300 ft (.421 ea) | 100-Bandsaw - 1 | <u>5242150</u> |

## Job Allocations

| Operation       | Component Part         | Required | Inventory | Allocated |
|-----------------|------------------------|----------|-----------|-----------|
| 100-Bandsaw - 1 | MSTEEL-A2-B0.500X1.250 | 13       | 77        | 0         |

## Part Specifications

| Spec No | Description | Target/Tolerance               | Limits           | Type  | Special Comments |
|---------|-------------|--------------------------------|------------------|-------|------------------|
| 1       | Blade       | 0.375inches $\pm$ 0.005        | 0.380<br>0.370   | .375  |                  |
| 2       | Blade       | 66.500Degrees $\pm$ 0.500      | 67.000<br>66.000 | 66.5  | Angle            |
| 3       | Blade       | 0.177inches + 0.005<br>- 0.001 | 0.182<br>0.176   | .176  | Diameter         |
| 4       | Blade       | 4.800inches + 0.010<br>- 0.001 | 4.810<br>4.799   | 4.80  |                  |
| 5       | Blade       | 4.396inches $\pm$ 0.005        | 4.401<br>4.391   | 4.400 |                  |
| 6       | Blade       | 0.576inches $\pm$ 0.005        | 0.581<br>0.571   | .576  |                  |
| 7       | Blade       | 45.000Degrees $\pm$ 0.500      | 45.500<br>44.500 | 45°   | Angle            |
| 8       | Blade       | 0.635inches $\pm$ 0.002        | 0.637<br>0.633   | .635  |                  |
| 9       | Blade       | 1.109inches $\pm$ 0.002        | 1.111<br>1.107   | 1.108 |                  |
| 10      | Blade       | 0.240inches $\pm$ 0.002        | 0.242<br>0.238   | .239  |                  |
| 11      | Blade       | 0.576inches $\pm$ 0.005        | 0.581<br>0.571   | .576  |                  |
| 12      | Blade       | 0.940inches $\pm$ 0.010        | 0.950<br>0.930   | .935  |                  |
| 13      | Blade       | 0.125inches $\pm$ 0.005        | 0.130<br>0.120   | .125  | Radius           |
| 14      | Blade       | 60.000Degrees $\pm$ 0.500      | 60.500<br>59.500 | 60°   | Angle            |
| 15      | Blade       | 0.325inches $\pm$ 0.005        | 0.330<br>0.320   | .326  |                  |
| 16      | Blade       | 30.000Degrees $\pm$ 0.000      | 30.000<br>30.000 | 30°   | Angle            |

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Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                         | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b>                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   | Skid-tube <input type="checkbox"/><br>Machining <input type="checkbox"/><br>Large Fab <input type="checkbox"/>                                                                                                                                                                                 | Cross tube <input type="checkbox"/><br>Small Fab <input type="checkbox"/><br>Finishing <input type="checkbox"/>                                                                                                                                                                                                              | Eng. (Non-AW) <input type="checkbox"/><br>Prod. Eng. Coord. <input type="checkbox"/><br>Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                   | Engineering <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Quality <input type="checkbox"/>                                                                                              |
| Date :                                                                                                                                                                                                                                                                                                                                                                                   | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        | MRB (QSI042)                                                                                                                                                                                                                                     |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        | Completed By                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        | Lead hand / Supervisor                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        | QC / QA Coordinator                                                                                                                                                                                                                              |
| <b>Root Cause</b><br><br>Operator <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Presservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |                                                                                                                                   | <b>FAULT CATEGORY</b>                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Bending<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Mislabeled | <input type="checkbox"/> Contamination<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Incomplete/Unclear Instructions<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Power Loss/Surge<br><input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain Direction<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Off-set/Set-up | <input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Outside Tolerance<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Misread |
|                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   | Other/Details:                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                  |



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB045640



**Supplier:** MEI001-VC  
Metcor Inc.  
560 Boul. Arthur Sauve  
Saint-Eustache  
QC  
J7R 5A8 Canada  
Phone: 450 473 1884  
Fax: 450 491 5498

**Attention:** Bejenaru, Livia

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** POHB045640

**PO Date:** 1/21/20

**Due Date:** 2/11/20

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Guerin, Kimberley  
Phone: 613-632-5200 Ext: 298  
kguerin@dartaero.com

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:**

E-MAILED  
2020-01-22

### Items

| Line Item    | Job    | Part     | Drawing          | Description                                                                                                                                                                | Status        | Account | Due Date | Order Quantity    | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|--------------|--------|----------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|----------|-------------------|-------------------|---------|------------------|----------------|
| 1            | 203824 | 646.3013 | 646.3000 Rev N/C | Blade : Various STC's<br>ISSUE P/O:<br><br>FINISH: HEAT TREAT TO 58-62 RC<br>ROCKWELL HARDNESS As Per Dwg 646.3000<br><br>PART ARE MADE FROM AISI A2 TOOL STEEL            | Firmed<br>X30 | -       | 2/11/20  | 30 pcs            | 0 pcs             | 30 pcs  | \$3.5638/pcs     | \$106.91       |
|              |        |          |                  |                                                                                                                                                                            |               |         |          |                   |                   |         |                  |                |
| 2            | 205075 | 646.3015 | 646.3000 Rev NC  | Blade : Various STC's<br>FINISH: HEAT TREAT TO 58-62 RC<br>ROCKWELL HARDNESS As per dwg 646.3000<br><br>PART ARE MADE FROM AISI A2 TOOL STEEL<br>DETAIL OF C OF C REQUIRED | Firmed<br>X30 | -       | 2/11/20  | 30 pcs            | 0 pcs             | 30 pcs  | \$3.5638/pcs     | \$106.91       |
|              |        |          |                  |                                                                                                                                                                            |               |         |          |                   |                   |         |                  |                |
|              | 205090 |          |                  |                                                                                                                                                                            | Firmed        | -       | 2/12/20  | 10 pcs            | 0 pcs             | 10 pcs  | \$3.5638/pcs     | \$35.64        |
| JAN 3 0 2020 |        |          |                  |                                                                                                                                                                            |               |         |          | <b>Sub Total:</b> | 40                | 0       | 40               | \$142.55       |





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB045640



### Items

| Line Item | Job    | Part     | Drawing          | Description                                                                                                                                                                                    | Status               | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD)      | Extended Price |
|-----------|--------|----------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|----------|----------------|-------------------|---------|-----------------------|----------------|
| 3         | 203832 | 646.3014 | 646.3000 Rev N/C | Blade<br>: Various<br>STC's<br>ISSUE P/O:<br><br>FINISH: HEAT<br>TREAT TO 58-<br>62 RC<br>ROCKWELL<br>HARDNESS<br>As Per Dwg<br>646.3000<br><br>PART ARE<br>MADE FROM<br>AISI A2 TOOL<br>STEEL | Firmed<br><i>X24</i> | -       | 2/11/20  | 24 pcs         | 0 pcs             | 24 pcs  | \$3.5638/pcs          | \$85.53        |
|           |        |          |                  |                                                                                                                                                                                                |                      |         |          |                |                   |         | Grand Total: \$335.00 |                |

JAN 30 2020

### Order Notes

Procurement Quality Clauses  
A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 1/22/20 10:42 AM Dart.Guerin.Kimberley



# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité Détaillé

Detailed Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 342327                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

| COMMANDE DU CLIENT<br>customer po                             | CLASSIFICATION PIECE<br>part classification | MATÉRIEL<br>material       | MAÎTRE D'OEUVRE<br>prime contractor | PROGRAM |
|---------------------------------------------------------------|---------------------------------------------|----------------------------|-------------------------------------|---------|
| HB045640                                                      | N/A                                         | A2                         |                                     |         |
| <b>SPÉCIFICATIONS DU PROCÉDÉ</b><br>processing specifications |                                             |                            |                                     |         |
| VAC HARDEN                                                    |                                             |                            |                                     |         |
| HARDEN AND TEMPER                                             |                                             |                            |                                     |         |
| EXIGENCE / requirement                                        | SPÉCIFICATIONS / specified                  | TESTS EXÉCUTÉS / performed | RÉSULTATS DE TESTS / results        |         |
| HARDNESS                                                      | 58 - 62 HRC                                 | 5<br>(907)                 | 61 - 62 HRC                         |         |

| QUANTITÉ<br>quantity | POIDS<br>weight | DESCRIPTION DES PIÈCES<br>parts description                                                                                                                                                                                         |
|----------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 94                   | 31              | 646.3000<br>(30) 646.3013 JOB 203824 DWG: 646.3000 REV N/C<br>(30) 646.3015 JOB 205075 DWG: 646.3000 REV N/C<br>(24) 646.3014 JOB 203832 DWG: 646.3000 REV N/C<br>(10) 646.3015 JOB 205090 DWG: 646.3000 REV N/C<br><br>1 BC = 5 BC |

DAS  
68  
9-89

### COMMENTAIRES / comments

VAC HARDEN 1800°F - 1:00 HRE

DOUBLE TEMPER 400°F - 2:00 HRS

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification.

All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

This document and any attached documents may contain confidential or proprietary information and may be subject to export control laws and regulations. If you are not the intended recipient, you are notified that any dissemination, copying of this e-mail and any attachments thereto or use of their contents by any means whatsoever is strictly prohibited. Unauthorized export or re-export is prohibited.

Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On



# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

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Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité Détaillé

Detailed Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 342327                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

Ce document et les documents qui lui sont joints peuvent contenir des informations confidentielles, être soumis aux réglementations relatives au contrôle des exportations ou ayant un caractère privé. S'ils ne vous sont pas destinés, nous vous signalons qu'il est strictement interdit de les divulguer, de les reproduire ou d'en utiliser de quelque manière que ce soit le contenu. Toute exportation ou réexportation non autorisée est interdite.

APPROUVÉ par / Approved by:

DATE: 2020-01-28

Lucie Desmarais  
QA Technician





# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ  
ST-EUSTACHE, QC J7R 5A8  
Tel: 450-473-1884 / Fax: 450-491-5498

## Reçu de livraison

Delivery Receipt

| BON DE TRAVAIL<br>Order | EXPÉDITEUR<br>Shipper ID | BON D'EXPÉDITION<br>Shipper |
|-------------------------|--------------------------|-----------------------------|
| 342327                  | 1                        | 143160                      |

EXPÉDITION COMPLÈTE / Shipped Complete

CLIENT / Customer 215

### DART AEROSPACE

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053



LIVRÉ À / Shipped To

### DART AEROSPACE

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053

| COMMANDE DU CLIENT<br>Customer PO | BON DE LIVRAISON DU CLIENT<br>Customer Shipper No. | TYPE DE MATÉRIEL<br>Material Type | DATE DE LA COMMANDE<br>Order Date | TRANSPORTEUR<br>Carrier |
|-----------------------------------|----------------------------------------------------|-----------------------------------|-----------------------------------|-------------------------|
| HB045640                          |                                                    | A2                                | 2020/1/21                         | client                  |

| QUANTITÉ<br>Quantity | No. PIÈCE /<br>Part No. | NOM DE LA PIÈCE /<br>Part Name | DESCRIPTION DE LA PIÈCE<br>Part Description | POIDS<br>Weight |
|----------------------|-------------------------|--------------------------------|---------------------------------------------|-----------------|
|----------------------|-------------------------|--------------------------------|---------------------------------------------|-----------------|

94 646.3000

31,

(30) 646.3000 JOB 203824 ✓  
(30) 646.3000 JOB 205075 ✓  
(24) 646.3000 JOB 203832 ✓  
(10) 646.3000 JOB 205090

1 BC = 5 BC

| TYPE DE CONTENEUR<br>Container Type | # DE CONTENEURS<br># Of Containers | COMMENTAIRES CONTENEUR<br>Container Comments |
|-------------------------------------|------------------------------------|----------------------------------------------|
|                                     | 1                                  | 1bc=5bc                                      |

|                             |  |
|-----------------------------|--|
| EXPÉDIÉ PAR:<br>Shipped by: |  |
|-----------------------------|--|

QUANTITÉ EXPÉDIÉE / Quantity Shipped : 94

POIDS EXPÉDIÉ / Weight Shipped : 31,00

QUANTITÉ RESTANTE / Quantity Remaining : 0

POIDS RESTANT / Weight Remaining : 0,00

RECEIVED

JAN 29 2020

DART AEROSPACE LTD.

QUANTITÉ EXPÉDIÉE / Quantity Shipped: 94

POIDS EXPÉDIÉ / Weight Shipped : 31,00

Signature:

Date:

EXPÉDIÉ LE / Shipped On : 2020/01/27